

## UNITED STATES DEPARTMENT OF COMMERCE **United States Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.
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09/244,304

02/03/99

BEACH

SHELLEY M BECKSTRAND

314 MAIN STREET OWEGO NY 13827

TM02/0830

**EXAMINER** 

AKERS, G

**ART UNIT** PAPER NUMBER

2164

DATE MAILED:

08/30/01

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

# Office Action Summary

Application No. **09/244,304** 

Applicant(s)

Beach

Examiner

**Geoffrey Akers** 

Art Unit 2164



The MAILING DATE of this communication appears	on the cover sheet with the correspondence address
Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SE THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.  after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep	36 (a). In no event, however, may a reply be timely filed
<ul> <li>be considered timely.</li> <li>If NO period for reply is specified above, the maximum statutory period communication.</li> <li>Failure to reply within the set or extended period for reply will, by statute.</li> <li>Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>	will apply and will expire SIX (6) MONTHS from the mailing date of this e, cause the application to become ABANDONED (35 U.S.C. § 133).
Status 1) ☑ Responsive to communication(s) filed on <u>Aug 9, 20</u>	01
2a) ☑ This action is <b>FINAL</b> . 2b) ☐ This acti	on is non-final.
3) Since this application is in condition for allowance exclosed in accordance with the practice under Ex pa	
Disposition of Claims	
4) 🗓 Claim(s) <u>1-11</u>	is/are pending in the applica
4a) Of the above, claim(s)	is/are withdrawn from considera
5)	is/are allowed.
6) 🗓 Claim(s) <u>1-11</u>	is/are rejected.
7)	is/are objected to.
8) Claims	are subject to restriction and/or election requirem
Application Papers	
9) The specification is objected to by the Examiner.	
10) The drawing(s) filed on is/a	re objected to by the Examiner.
11) The proposed drawing correction filed on	is: a pproved b disapproved.
12) $\square$ The oath or declaration is objected to by the Examine	er.
Priority under 35 U.S.C. § 119 13)	rity under 35 U.S.C. § 119(a)-(d).
a) All b) Some* c) None of:	
1.  Certified copies of the priority documents have	been received.
• • • •	been received in Application No
<ol> <li>Copies of the certified copies of the priority doc application from the International Bureau</li> <li>*See the attached detailed Office action for a list of the</li> </ol>	(PCT Rule 17.2(a)).
14) Acknowledgement is made of a claim for domestic pr	·
Attachment(s)	
15) Notice of References Cited (PTO-892)	18) Interview Summary (PTO-413) Paper No(s).
16) Notice of Draftsperson's Patent Drawing Review (PTO-948)	19) Notice of Informal Patent Application (PTO-152)
17) Information Disclosure Statement(s) (PTO-1449) Paper No(s).	20) Other:

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#### **DETAILED ACTION**

## Response to Amendment

- 1. The text of those sections of Title 35 US Code not included herein can be found in a prior Office Action(see Serial No: 09/192852). The text of those sections of Title 35 US Code not otherwise provided in a prior Office action will be included here where appropriate.
- 2. This action is responsive to the amendment filed 8/9/01.
- 3. Claims 1-11 are pending.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

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5. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein (US 5,845,285) in view of Geer (US 5,930,778).

6. As per claim 1, Klein discloses a method for operating a computing system, comprising the steps of: processing electronic invoices received from a vendor to identify duplicate invoices (abstract, column 5, particularly lines 55-65, column 6, particularly lines 1-5); introducing data (invoices) not identified as duplicates into a system (column 26, particularly lines 32-36); and electronically rejecting data (invoices) identified as duplicates without introducing the data into the system (column 26, particularly lines 38-43). Klein does not explicitly teach preprocessing of invoices. However, Geer discloses preprocessing of original invoices before introduction into a database (title, column 5, lines 58-60, column 6, particularly lines 43-45). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to use method of duplicate invoice identification of Klein in preprocessing of invoices before introduction into a database of Geer because this would allow duplicate data to be sorted out as soon as possible. Klein does not explicitly teach introduction to and rejection from a accounts payable data base. However, Klein does suggest this feature by disclosing correction of the system (column 26, particularly lines 40-44) and filtering database (column 27, particularly lines 22-25). Further, accounts payable data base is deemed to be inherent in Klein's description of invoicing system (column 5, particularly lines 46-65). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to introduce and reject data from an accounts payable

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database because this would allow filtering and sorting out to be implemented as soon as data is available.

7. As per claim 2, Klein discloses a method for operating a computing system, comprising the steps of: auditing invoice file for a duplicate invoice item (abstract, column 5, particularly lines 55-65, column 6, particularly lines 1-5); upon determining data is a duplicate invoice having a same invoice number (column 6, lines 3-10), creating an electronic duplicate data transaction (column 26, particularly lines 3743); and posting to the system only data determined not to be duplicate (column 26, particularly lines 32-36). Klein does not explicitly teach grabbing an inbound EDI invoice file from a vendor before it is input to a accounts payable database and creating a transaction to a vendor. However, official notice is taken that it is old and well known in the art of data entry to grab data before input into a database for the purpose of examination for error. Further, official notice is taken that it is old and well known in the art of electronic communication and commerce to use EDI for invoicing. It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to grab an inbound EDI invoice data before inputting it into a database because this would allow detection of duplicate as soon as possible. Klein does not explicitly teach creating transaction back to the vendor. However, Klein suggests this feature by disclosing a warning report system (column 26, particularly lines 38-43). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to create a transaction back to the vendor because this would allow the vendor to be informed of the mistake and take corrective actions. Klein does not explicitly teach determining duplicate

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number. However, Klein at least suggests this feature by disclosing determining duplicate invoice by comparing invoice number. Furthermore, official notice is taken that determining duplicate invoice having a same vendor invoice designation, same purchase order number, and same item number is old and well known in the art of invoice comparison. It would have been obvious to one or ordinary skill in the art at the time of applicant's invention to determine duplicate invoices by comparing same vendor invoice designation, same purchase order number and same item number because this would allow accurate identification of duplicate invoices.

8. As per claim 3, Klein discloses auditing step comprising sorting invoices against invoice number (column 6, particularly lines 8-10). Klein does not explicitly teach auditing step comprising first sorting invoice against an accounts payable production table for same vendor, second sorting hits from said first sorting for same purchase order billed, third sorting hits from second sorting for same items billed on purchase order, and fourth sorting hits from third sorting to identify invoice as duplicate invoice if it contains an item having a net sum greater than zero. However, Klein does discuss using neural network (column 27, particularly lines 54-65) that executes multiple comparing and sorting hits (column 28, particularly lines 28-41), and identifying data as duplicate if it does not pass a threshold number of hits (column 28, particularly lines 44-45). This suggests sorting of invoice for same vendor, purchase order billed, and items billed, since they are essential for identifying duplicates. Further Klein also discuss threshold value, term to describe the function of the "net sum greater than zero" of applicants' invention. It would have been obvious to

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one of ordinary skill in the art at the time of applicants' invention to use invoice for same vendor, purchase order billed, and items billed as entries that are used in neural network comparing and sorting method of Klein because those entry values are essential for determining duplicate data. Further, it would have been obvious to one orf ordinary skill in the art at the time of applicants' invention to use zero as the threshold value disclosed in Klein because this would allow maximum detection of duplicates.

9.As per claim 4, Klein discloses a method for operating a computing system responsive to receipt of an electronic input (abstract). Klein discloses automatically identifying previously received invoices having the same vendor invoice identifier (column 6, particularly lines 8-10, column 16, lines 1-5). Klein does not explicitly teach automatically grabbing an invoice from a vendor before it is input to a accounts payable database and creating a transaction to a vendor. However, official notice is taken that it is old and well known in the art of data entry to grab data before input into a database for the purpose of examination for error. It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to automatically grab an invoice data before inputting it into a database because this would allow detection of duplicate as soon as possible. Further, Klein does not explicitly teach automatically identifying invoices having corresponding items, and calculating the net sum of items on input invoice having corresponding items. However, Klein does discuss using neural network (column 27, particularly lines 54-65) that executes multiple comparing and sorting hits (column 28, particularly lines 28-41), and identifying data as duplicate if it does not pass a threshold number of hits (column 28, particularly

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lines 44-45). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to use item as a comparison factor in Klein's system because type of item is essential in determining duplicates. Further, It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to calculating the net sum of items to determine if the data is duplicate since this would utilize Klein's threshold value. Klein does not explicitly teach automatically communicating a duplicate invoice rejection message back to the vendor without posting the input invoice to the accounts payable database. However, Klein suggests this feature by disclosing a warning report system (column 26, particularly lines 38-43). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to communicate a duplicate invoice rejection message back to the vendor because this would allow the vendor to be informed of the mistake and take corrective actions. Further, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to refrain from posting the input invoice to the accounts payable database because this would prevent posting of duplicate entry Klein discloses posting to the system data determined not to be duplicate (column 26, particularly lines 32-36).

10. As per claim 5, Klein discloses a program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps for processing electronic input (abstract), said method step comprising:automatically processing electronic invoices received from a vendor to identify duplicate invoices (abstract, column 5,

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particularly lines 55-65, column 6, particularly lines 1-5, column 16, lines 1-5); introducing data (invoices) not identified as duplicates into a system (column 26, particularly lines 32-36); and ` automatically rejecting data (invoices) identified as duplicates without introducing the data into the system (column 26, particularly lines 38-43, column 27, lines 26-29). Klein does not explicitly teach preprocessing of invoices before introduction into an accounts payable data base. However, Geer discloses preprocessing of invoices before introduction into an accounts payable data base (abstract, column 6, particularly lines 43-45). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to use method of duplicate invoice identification of Klein in preprocessing of invoices of Geer because this would allow duplicate data to be sorted out as soon as possible. Klein does not explicitly teach introduction to and rejection from a accounts payable data base. However, Klein does suggest this feature by disclosing correction of the system (column 26, particularly lines 40-44) and filtering database (column 27, particularly lines 22-25). Further, accounts payable data base is deemed to be inherent in Klein's description of invoicing system (column 5, particularly lines 46-65). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to introduce and reject data from an accounts payable database because this would allow filtering and sorting out to be implemented as soon as data is available. Klein does not explicitly teach determining duplicate invoice having same vendor invoice designation, same purchase order number, same item number, and havin sum grreater than zero. However, Klein at least suggests this feature by disclosing determining duplicate invoice by comparing invoice number. Furthermore, official notice is taken that

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determining duplicate invoice having a same vendor invoice designation, same purchase order number, same item number, and having sum greater than zero is old and well known in the art of invoice comparison. It would have been obvious to one or ordinary skill in the art at the time of applicant's invention to determine duplicate invoices by comparing\_same vendor invoice designation. same purchase order number, same item number, and having sum greater than zero because this would allow accurate identification of duplicate invoices.

11. As per claim 6, Klein discloses a program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps for processing electronic input (abstract). Klein discloses identifying previously received invoices having the same vendor invoice identifier (column 6, particularly lines 8-10). Klein does not explicitly teach grabbing an invoice from a vendor before it is input to a accounts payable database and creating a transaction to a vendor. However, official notice is taken that it is old and well known in the art of data entry to grab data before input into a database for the purpose of examination for error. It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to grab an invoice data before inputting it into a database because this would allow detection of duplicate as soon as possible. Further, Klein does not explicitly teach identifying invoices having corresponding items, and calculating the net sum of items on input invoice having corresponding items. However, Klein does discuss using neural network (column 27, particularly lines 54-65) that executes multiple comparing and sorting hits (column 28, particularly lines 28-41), and identifying data as duplicate if it does not pass a threshold number of

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hits (column 28, particularly lines 44-45). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to use item as a comparison factor in Klein's system because type of item is essential in determining duplicates. Further, It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to calculating the net sum of items to determine if the data is duplicate since this would utilize Klein's threshold value. Klein does not explicitly teach communicating a duplicate invoice rejection message back to the vendor. However, Klein suggests this feature by disclosing a warning report system (column 26, particularly lines 38-43). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to communicate a duplicate invoice rejection message back to the vendor because this would allow the vendor to be informed of the mistake and take corrective actions. Klein does not explicitly teach rag, bbing, identifying -and calculating steps without posting the input invoice to the accounts payable database. However, official notice is taken that performing integrity analysis on data without posting that data to a permanent database is old and well known in the art of database. It would have been obvious to one of ordinary skill in the art a the time of applicant's invention to perform analysis without posting it to the database because this would allow duplicate data from being posted. Klein discloses posting to the system data determined not to be duplicate (column 26, particularly lines 32-36).

12. As per claim 7, Klein discloses an article of manufacture comprising a computer useable medium having program code means (abstract). Klein discloses identifying previously received invoices having the same vendor invoice identifier (column 6, particularly lines 8-10). Klein does

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not explicitly teach grabbing an invoice from a vendor before it is input to a accounts payable database and creating a transaction to a vendor. However, official notice is taken that it is old and well known in the art of data entry to grab data before input into a database for the purpose of examination for error. It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to grab an invoice data before inputting it into a database because this would allow detection of duplicate as soon as possible. Further, Klein does not explicitly teach identifying invoices having corresponding items, and calculating the net sum of items on inpuf invoice having corresponding items. However, Klein does discuss using neural network (column 27, particularly lines 54-65) that executes multiple comparing and sorting hits (column 28, particularly lines 28-41), and identifying data as duplicate if it does not pass a threshold number of hits (column 28, particularly lines 44-45). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to use item as a comparison factor in Klein's system because type of item is essential in determining duplicates. Further, It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to calculating the net sum of items to determine if the data is duplicate since this would utilize Klein's threshold value. Klein does not explicitly teach communicating a duplicate invoice rejection message back to the vendor. However, Klein suggests this feature by disclosing a warning report system (column 26, particularly lines 38-43). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to communicate a duplicate invoice rejection message back to the vendor because this would allow

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the vendor to be informed of the mistake and take corrective actions. Klein discloses posting to the system data determined not to be duplicate (column 26, particularly lines 32-36). 13. As per claim 8, Klein discloses an article of manufacture comprising a computer readable medium having computer readable program code means (abstract). Klein discloses computer readable code means for:processing electronic invoices 'received from a vendor to identify duplicate invoices (abstract, column 5, particularly lines 55-65, column 6, particularly lines 1-5); introducing data (invoices) not identified as duplicates into a system (column 26, particularly lines 32-36); and rejecting data (invoices) identified as duplicates without introducing the data into the system (column 26, particularly lines 38-43). Klein does not explicitly teach preprocessing of invoices. However, Geer discloses preprocessing of invoices (abstract, column 6, particularly lines 43-45). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to use method of duplicate invoice identification of Klein in preprocessing of invoices of Geer because this would allow duplicate data to be sorted out as soon as possible. Klein does not explicitly teach introduction to and rejection from a accounts payable data base. However, Klein does suggest this feature by disclosing correction of the system (column 26, particularly lines 40-44) and filtering database (column 27, particularly lines 22-25). Further, accounts payable data base is deemed to be inherent in Klein's description of invoicing system (column 5, particularly lines 46-65). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention, to introduce and reject data from an accounts payable database because this would allow filtering and sorting out to be implemented as soon as data is available. Klein does not

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explicitly teach determining duplicate invoice having same vendor invoice designation, same purchase order number, same item number, and having sum greater than zero. However, Klein at least suggests this feature by disclosing determining duplicate invoice by comparing invoice number. Furthermore, official notice is taken that determining duplicate invoice having a same vendor invoice designation, same purchase order number, same item number, and having sum greater than zero is old and well known in the art of invoice comparison. It would have been obvious to one or ordinary skill in the art at the time of applicant's invention to determine duplicate invoices by comparing same vendor invoice designation, same purchase order number, same item number, and havin serum greater than zero because this would allow accurate identification of duplicate invoices.

14. As per claim 9, Klein discloses a computing system responsive to receipt of an electronic input (abstract). Klein discloses identifying previously received invoices having the same vendor invoice identifier (column 6, particularly lines 8-10). Klein does not explicitly teach grabbing an invoice from a vendor before it is input to a accounts payable database and creating a transaction to a vendor. However, official notice is taken that it is old and well known in the art of data entry to grab data before input into a database for the purpose of examination for error. It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to grab an invoice data before inputting it into a database because this would allow detection of duplicate as soon as possible. Further, Klein does not explicitly teach identifying invoices having corresponding items, and calculating the net sum of items on input invoice having corresponding items.

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However, Klein does discuss using neural network (column 27, particularly lines 54-65) that executes multiple comparing and sorting hits (column 28, particularly lines 28-41), and identifying data as duplicate if it does not pass a threshold number of hits (column 28, particularly lines 44-45). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to use item as a comparison factor in Klein's system because type of item is essential in determining duplicates. Further, It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to calculating the net sum of items to determine if the data is duplicate since this would utilize Klein's threshold value.

Klein does not explicitly teach communicating a duplicate invoice rejection message back to the vendor. However, Klein suggests this feature by disclosing a warning report system (column 26, particularly lines 38-43). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to communicate a duplicate invoice rejection message back to the vendor because this would allow the vendor to be informed of the mistake and take corrective actions. Klein discloses posting to the system data determined not to be duplicate (column 26, particularly lines 32-36).

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15. Claims 10 and 11 are rejected under 35 USC 103(a) as unpatentable over Geer(US Pat. No: 5,930,778) and further in view of Rail(US Pat. No: 5,680,611).

16.(NEW) As per claim 10, Geer teaches a computing system responsive to receipt of an electronic input invoice from vendors, comprising an accounts payable database(col 7 lines 4-

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25)(Fig 1/4/5), sort logic for sorting invoices into credit/debit sequence in the order received(col 9 lines 26-28)(col 9 lines 37-44)(Fig 1/14/12/16), posting logic for posting credit invoices to said accounts payable database(col 12 line 38-col 13 line 3)(col 13 lines 51-65). Rail teaches net sum logic for evaluating debit invoices in sequential order with respect to previously received debit and credit invoices to identify a duplicate debit invoice item(Fig 3/220/212/214/202/204/208)(Fig 2/104/106/108/114/116/110/112)(col 2 line 50-col 3 line 5), a duplicate debit invoice item being an invoice item having a net sum greater than zero determined with respect to previously received invoices in the same vendor invoice designation, same purchase order number, and same item and posting logic being further operable for posting to said accounts payable database only those debit invoices for which said invoice itms have a net sum less than or equal to zero(col 4 lines 46-63)(col 5 lines 39-49)(col 5 lines 8-22). It would have been obvious to one skilled in the art at the time of the invention to combine Geer in view of Rail to teach the above. The motivation for this is to describe a computing system that can correctly bill and remit debits and credits to clients and vendors.

17.(NEW) As per claim 11 Rail teaches rejection logic responsive to an input debit invoice from a vendor having an item with a net sum greater than zero for communicating a duplicate invoice rejection message back to said vendor(col 4 lines 23-63)(col 5 lines 8-37)(Fig 3). It would have been obvious to one skilled in the art at the time of the invention to combine Geer in view of Rail to teach the above. The motivation for this is to describe a computing system that can correctly bill and remit debits and credits to clients and vendors.

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### Response to Arguments

18. Applicant's arguments filed 8/9/01 have been fully considered but they are not persuasive. Geer teaches preprocessing of original invoices before introduction to a database(col 5 lines 58-60)(col 6 lines 43-45). A method of duplicate invoice identification of Klein could then be used in conjunction with Geer in the preprocessing of invoices before the introduction into the database of Geer. As applicant concedes Geer is a system which matches checks for payment and processing of invoices. Included in this process is receiving of the invoices to match the checks for payment.

Klein does not explicitly teach preprocessing of invoices. However, Geer discloses preprocessing of original invoices before introduction into a database (title, column 5, lines 58-60, column 6, particularly lines 43-45). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to use method of duplicate invoice identification of Klein in preprocessing of invoices before introduction into a database of Geer because this would allow duplicate data to be sorted out as soon as possible. Klein does not explicitly teach introduction to and rejection from a accounts payable data base. However, Klein does suggest this feature by disclosing correction of the system (column 26, particularly lines 40-44) and filtering database (column 27, particularly lines 22-25). Detection of duplicate data before entry into an accounts payable database is desirable to minimize errors. It is well known in the art of data entry to grab data before input into a database for the purpose of examination for error.

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The sampling of data for error detection is established. When in the sequence this process is done does not change the functionality of the process. Klein discloses a method for automatically identifying previously received invoices having the same vendor invoice identifier(col 6 lines 8-10)(col 16 lines 1-5). Klein's method offers a method to determine duplicate invoices by comparing identifiers. Klein teaches introducing data (invoices) not identified as duplicates into a system (col 26 lines 32-36); and automatically rejecting data (invoices) identified as duplicates without introducing the data into the system (column 26 lines 38-43, column 27, lines 26-29). Klein does discuss using neural network (col 27, lines 54-65) that executes multiple comparing and sorting hits (col 28, lines 28-41), and identifying data as duplicate if it does not pass a threshold number of hits (col 28, lines 44-45). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to use item as a comparison factor in Klein's system because type of item is essential in determining duplicates. Klein discloses computer readable code means for:processing electronic invoices 'received from a vendor to identify duplicate invoices (abstract, column 5, particularly lines 55-65, column 6, lines 1-5); introducing data (invoices) not identified as duplicates into a system (column 26, particularly lines 32-36); and rejecting data (invoices) identified as duplicates without introducing the data into the system (column 26, particularly lines 38-43). Klein does not explicitly teach preprocessing of invoices. However, Geer discloses preprocessing of invoices (abstract, column 6, particularly lines 43-45). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to use method of duplicate invoice identification of Klein in preprocessing of invoices of Geer because this would

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allow duplicate data to be sorted out as soon as possible. Klein does discuss using neural network (column 27, particularly lines 54-65) that executes multiple comparing and sorting hits (column 28, particularly lines 28-41), and identifying data as duplicate if it does not pass a threshold number of hits (column 28, particularly lines 44-45). It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to use item as a comparison factor in Klein's system because type of item is essential in determining duplicates. Klein suggests communication of a duplicate invoice rejection message back to the vendor by disclosing a warning report system (column 26, particularly lines 38-43).

Geer teaches a computing system responsive to receipt of an electronic input invoice from vendors, comprising an accounts payable database(col 7 lines 4-25)(Fig 1/4/5), sort logic for sorting invoices into credit/debit sequence in the order received(col 9 lines 26-28)(col 9 lines 37-44)(Fig 1/14/12/16), posting logic for posting credit invoices to said accounts payable database(col 12 line 38-col 13 line 3)(col 13 lines 51-65). Rail teaches net sum logic for evaluating debit invoices in sequential order with respect to previously received debit and credit invoices to identify a duplicate debit invoice item(Fig 3/220/212/214/202/204/208)(Fig 2/104/106/108/114/116/110/112)(col 2 line 50-col 3 line 5), a duplicate debit invoice item being an invoice item having a net sum greater than zero determined with respect to previously received invoices in the same vendor invoice designation, same purchase order number, and same item and posting logic being further operable for posting to said accounts payable database only those debit invoices for which said invoice itms have a net sum less than or equal to zero(col 4 lines 46-

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63)(col 5 lines 39-49)(col 5 lines 8-22). It would have been obvious to one skilled in the art at the time of the invention to combine Geer in view of Rail to teach the above. The motivation for this is to describe a computing system that can correctly bill and remit debits and credits to clients and vendors. Rail teaches rejection logic responsive to an input debit invoice from a vendor having an item with a net sum greater than zero for communicating a duplicate invoice rejection message back to said vendor(col 4 lines 23-63)(col 5 lines 8-37)(Fig 3). It would have been obvious to one skilled in the art at the time of the invention to combine Geer in view of Rail to teach the above. The motivation for this is to describe a computing system that can correctly bill and remit debits and credits to clients and vendors.

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#### Conclusion

19. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Questions regarding this communication should be addressed to the examiner, Dr. Geoffrey Akers, P.E., who can be reached at (703)-306-5844 between the hours of 6:30 AM and 5:00 PM Monday through Friday. If attempts to contact the examiner are unsuccessful, the examiner's supervisor, Mr. Vincent Millin, SPE, may be reached at (703)-308-1065.

GRA

August 23, 2001

VINCENT MILLIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100